Single Use Agricultural Wetland Banks

Ryan Heinen

BWSR and Corps Agricultural Wetland Specialist

What is a Single Use Agricultural Bank?

- -Credits from wetland restoration (as opposed to creation or preservation)
- -CRP restored wetlands
- -Use of Modified MnRam Tool for evaluation and standards
- - The credits may be used only to offset wetland impacts on lands currently in agricultural use

History

- State Board of Water and Soil Resources (BWSR) began “ag banking” in 2012
- Coordinated with USDA NRCS and “Swampbuster”
- Provided credits for ag producers who impact wetlands on ag lands
- Expired CRP lands were targeted for credit
- Corps-concurred credits were not a priority

Corps Involvement

- RGP-002 (AG GP) in 2012 and 2013: interest among farmers in mitigation
- Corps held IRT meeting in April 2013 to discuss Single Use Banks for Ag (SUBs)
- Idea of “Extended Restoration” as a credit option (page 28, District Mitigation Policy) was proposed
- 2014: IRT endorsed SUBs and Extended Restoration

Flexibility in Bank Standards

Use of Ag Bank Credits

- For farmed and other degraded agricultural wetlands
- 1:1 replacement in same BSA
- 2:1 in adjacent BSA
- Not allowed in non-adjacent BSA

Ag Bank or Standard Bank?

Single Use Ag Bank for CRP Rollovers

- Generally Lower Vegetation Standards
- CRP Rollover is an option for BWSR
- Corps only option for CRP is the Single Use Ag Bank
- MnRam for Crediting

Vegetation Standards

WET MEADOWS

High Quality: Composed of 10 or more species of native/non-invasive grasses, sedges, ferns, rushes and/or forbs. Reed canary grass, purple loosestrife, stinging nettle and/or other invasive species (Table 1), if present, cumulatively comprise less than 20 percent cover. Non-native buckthorns absent or comprise less than 10 percent cover within the wet meadow community.

Medium Quality: Community composed of 5 to 9 species of native grasses, sedges, rushes, ferns and/or forbs; and/or invasive herbaceous species listed above cumulatively comprise 20 to 50 percent cover; and/or non-native buckthorns, comprise 10 to 30 percent cover within the wet meadow community.

Low Quality: Composed of 4 or fewer species of native grasses, sedges, rushes, ferns and/or forbs; and/or invasive herbaceous species listed above cumulatively comprise more than 50 percent cover; and/or non-native buckthorns comprise 30 to 50 percent cover within the wet meadow community. For example, this rating includes the nearly monotypic stands of reed canary grass that are commonly encountered.

[Note: Greater than 50 percent cover by buckthorn shrubs key out to shrub-carrs]

Crediting CRP Based on MnRam

Not eligible for credit	50% credit for wetland areas	75% credit for wetland areas
Low rating for vegetative diversity/integrity, or 2 or 3 low ratings (e.g., 2 low and 1 high) among the MnRAM functions of floodwater attenuation; water quality downstream and wildlife habitat	Medium or high rating for vegetative diversity/integrity, and No more than 1 low rating (e.g., 1 low and 2 medium) among the MnRAM functions of floodwater attenuation; water quality downstream and wildlife habitat.	1. Medium or high rating for vegetative diversity/integrity, and 2. At least 1 high and no low rating (e.g., 2 medium and 1 high) among the MnRAM functions of floodwater attenuation; water quality downstream and wildlife habitat


Sherman Olson Ag Wetland Bank
West Bank 19- Swift County
N
Swift County T98
Swift County T115
Wetland Bank Boundary
Wet Meadow
Shallow Marsh
Upland Buffer
Food Plot
Berm
USFWS Wetland Easement
0
0.05
0.1
0.2
0.3
0.4
Miles

Eligibility of CRP for Wetland Banking

- 1. Restored Wetland
- 2. Restoration of Natural Hydrology
- 3. Native, Non invasive Vegetation
- 4. Expired Contract or Easement
- 5. Functional Benefits
- 6. Structural Integrity
- 7. Sustainability
- 8. Upland Buffer

Agricultural Wetland Evaluation Tool (Modified MnRam)

Agricultural Bank Site Evaluation Tool Results:

West Bank 19

Function	Rating (Exceptional, High, Medium or Low)
Vegetation Diversity/Integrity:	High
Flood Attenuation:	High
Water Quality Downstream:	High
Characteristic Wildlife Habitat Structure:	High

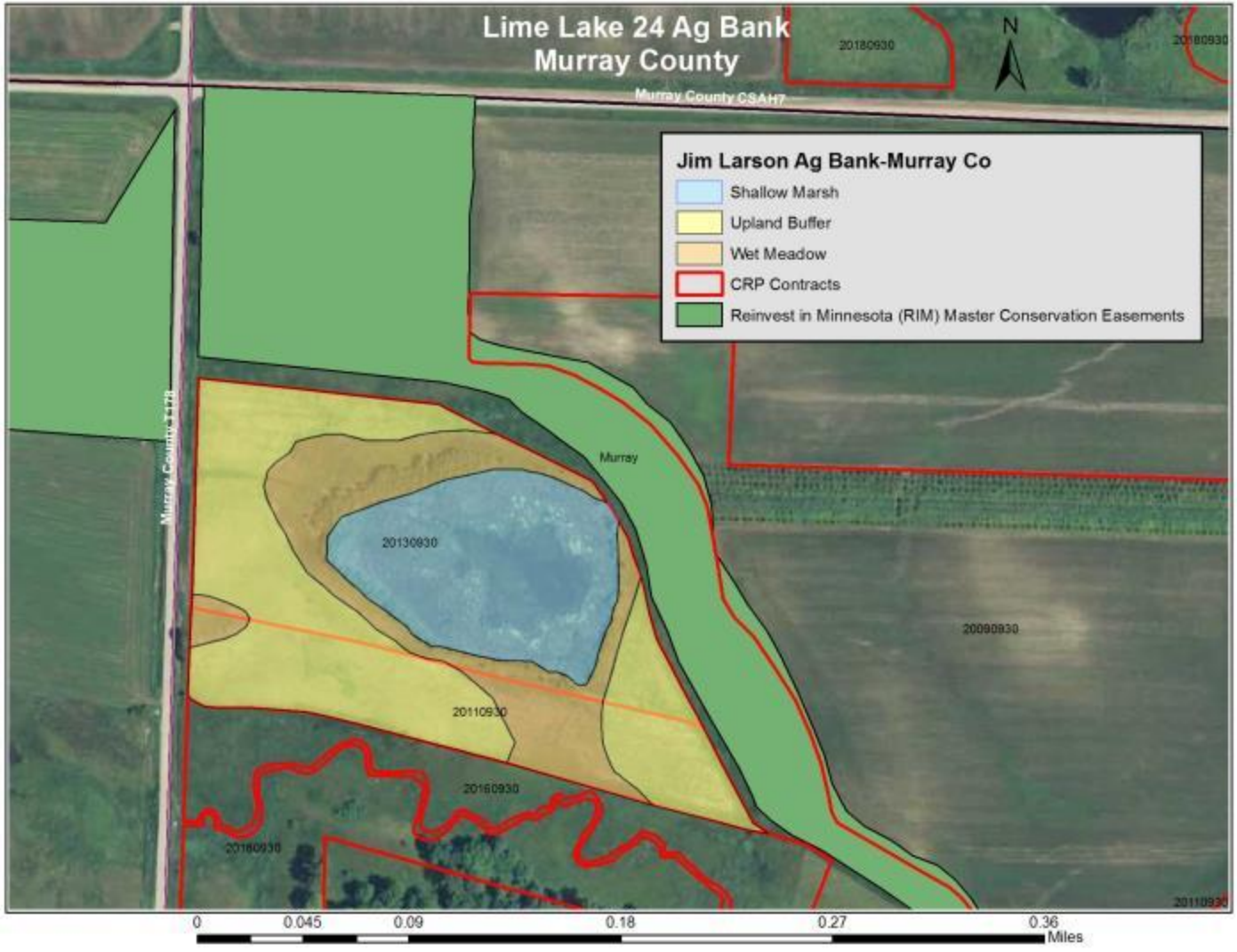
Plant Communities

Plant Community	Community Type	Community Proportion (% of total)	Community Quality
#1	Shallow Marsh	52	High
#2	Fresh(wet) Meadow	48	Medium

Selected MnRAM Questions

Question	Response
12. Outlet characteristics for flood retention	A
13. Outlet characteristics for hydrologic regime	A
14. Dominant upland land use (within 500 ft)	A
15. Soil condition (wetland)	A
16. Vegetation (% cover)	85
17. Emerg. veg. flood resistance	A
18. Sediment delivery	A
19. Upland soils (based on soil group)	B
20. Stormwater runoff pretreatment & detention	C
21. Subwatershed wetland density	A
22. Channels/sheet flow	B
23. Adjacent naturalized buffer average width(ft)	>300 ft
24. Adjacent Area Mangement *(total 100%)*	
% Full	100
% Manicured	0
% Bare	0

Question	Response
25. Adjacent Area Diversity & Structure *(total 100%)*	
% Native	100
% Mixed	0
% Sparse/Inv /Exotic	0
26. Adjacent Area Slope *(total 100%)*	
% Gentle	75
% Moderate	25
% Steep	0
27. Downstream sensitivity/WQ protection	C
37. Vegetation interspersion cover	5
38. Community interspersion	1
39. Wetland detritus	A
40. Wetland interspersion on landscape	A
41. Wildlife barriers	A


Lime Lake 24 Ag Bank
Murray County
Murray County CSAH7
Murray County CSAH 8
N
Jim Larson Ag Bank-Murray Co
Shallow Marsh
Upland Buffer
Wet Meadow
CRP Contracts
Reinvest in Minnesota (RIM) Master Conservation Easements
Murray
20180930
20130930
20090930
20110930
20160930
20180930
20110930
0
0.045
0.09
0.18
0.27
0.36
Miles

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Minnesota Board of Water & Soil Resources

Print Results

Agricultural Bank Site Evaluation Tool Results:

Larson Ag Bank Murray Co

Function	Rating (Exceptional, High, Medium or Low)
Vegetation Diversity/Integrity:	Medium
Flood Attenuation:	Medium
Water Quality Downstream:	High
Characteristic Wildlife Habitat Structure:	High

Plant Communities

Plant Community	Community Type	Community Proportion (% of total)	Community Quality
#1	Shallow Marsh	40	Medium
#2	Deep Marsh	10	Medium
#3	Fresh(wet) Meadow	50	Medium

Minnesota Board of Water & Soil Resources

Wetland Bank Credit Allocation Table

Map ID	Credit Action	Acres	Credit Allocation BWSR Credit Estimate		Credit Allocation CORPS Credit Estimate	
			% Credit	Credit Amount	% Credit	Credit Amount
Wet Meadow	Subp. 6 Protection of wetlands previously restored via conservation easements. Corps: Extended Restoration	2.92	75%	2.19	75%	2.19
Shallow Marsh	Subp. 6 Protection of Wetlands Previously restored via conservation easement. Corps: Extended Restoration	3.96	75%	2.97	75%	2.97
Deep Marsh	Subp. 6 Protection of Wetlands Previously restored via conservation easement. Corps: Extended Restoration	1.11	75%	0.83	1.11	0.83
Berm Removal	Subp. 3 Restoration of completely drained or filled wetland areas. Corps: Restoration via Re-establishment	0.26	100%	0.26	100%	0.26
New Wetland	Subp. 3 Restoration of completely drained or filled wetland areas. Corps: Restoration via Re-establishment	2.05	100%	2.05	100%	2.05

TEP Evaluation of CRP for Wetland Banking

- 1. Assemble Scoping Materials
- 2. Review CRP Contract or Easement
- 3. Identify Wetlands
- 4. Confirm Wetlands were Restored
- 5. On-Site Functional Assessment
- 6. Identify Landscape Features
- 7. Inspect Structures
- 8. Determine Eligibility
- 9. Estimate Credit Yield for Eligible Acres
- 10. Assemble TEP Findings

Single Use Ag Banks Typically :

- Shortened Vegetation Monitoring
- No Hydrology Monitoring
- Can be Credits Transferred From the Standard Bank or Expired CRP

Ag Bank Plan- 8. Vegetation Plan

- **Vegetation Plan**
- No further establishment necessary as the site has been restored through a CRP contract. Uplands and wetlands throughout the site have a good diversity of native prairie plant species. Wetlands have river bulrush, blue joint grass, smartweed, green bulrush, foxtail barley, lake sedge, blue vervain, Maximillian sunflower, dog bane, wild licorice, cattail and some reed canary grass. Uplands contained big bluestem, switch grass, little bluestem, Canada wild rye, western wheat grass, purple prairie clover, white prairie clover, windflower, purple coneflower, gray headed coneflower, hoary vervain, black eyed-Susan and daisy fleabane.
- Some young cottonwood and willow trees and brush are present on the perimeter of the two shallow marsh wetland basins. These will need to be cut and stump treated with herbicide. Trees will be cut and treated in the fall and winter of 2014. See Figure 16 for tree removal and control areas.

Ag Bank Plan- 9. Construction Plan

- **9.1 Design Approach**
- *Discuss the general design approach proposed to achieve the planned restoration goals for hydrology such as disable drainage system, divert water, impound water, etc. Provide a detailed description of the proposed construction work to be performed for each wetland area to be restored or created.*
- No further work is needed; the site was fully restored under a CRP contract. -Not What Was Done in the Past

Ag Bank Plan- 10. Supplemental Info

- Restored Wetlands
- Restoration of Natural Hydrology
- Native, Non-invasive Vegetation
- Expired Contract or Easement
- Functional Benefits- Modified MnRam Tool
- Structural integrity
- Sustainability
- Upland Buffer

Contact Info

Ryan Heinen
Agricultural Wetland Banking Specialist
Minnesota Board of Water and Soil Resources
Cell: 218-239-0222
E-mail: ryan.heinen@state.mn.us